



Fire Protection Training

Procedures Handbook 4300

MOBILE EQUIPMENT

TOPIC: How to Use Bulldozer Swamper Hand Signals

TIME FRAME: :30

LEVEL OF INSTRUCTION: Level II

BEHAVIORAL OBJECTIVE:

Condition: A student in appropriate wildland PPE per CAL FIRE policy, a flashlight and verbal commands

Behavior: Student will demonstrate the proper hand signals for bulldozer maneuvering and winch operation under simulated fireground conditions.

Standard: With a minimum of 80% accuracy

MATERIALS NEEDED:

- Flashlight
- Bulldozer (if available)
- Appropriate visual aids
- Audio visual equipment
- Appropriate wildland PPE per CAL FIRE policy

REFERENCES:

- NWCG, Fireline Handbook #3, PMS 410-1
- CAL FIRE Bulldozer Safety Video, Susanville Training Camp

PREPARATION:

It may become necessary for any CAL FIRE fire suppression employee to signal a bulldozer. It is important that the meaning of your signal is understood by the dozer operator. Using standard signals will avoid confusion and create a safer working environment.



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HOW TO USE BULLDOZER
SWAMPER HAND SIGNALS

OPERATIONS

KEY POINTS

BULLDOZER MANEUVERING SIGNALS

1. Reverse or back up

2. Stop or shut down

3. Turn

4. Caution

Information Sheet #1

- 1a. While in operators view
 - b. With right arm fully extended
 - c. Hand open
 - d. Make continuous circling motions in front of the body
 - e. Until completion of the maneuver
- 2a. While in operator's view
 - b. With right arm extended
 - c. In front of the body
 - d. At chest height
 - e. With the palm down
 - f. Swing arm repeatedly to the left and right side of the body
 - g. Motion parallel to the ground
- 3a. In operator's view
 - b. Using arm on side of body to which turn is to be made
 - c. Fully extend arm to full upright position (overhead and perpendicular)
 - d. Hand open
 - e. Repeated downward sweeps of the arm to the area of the thigh
- 4a. In operator's view
 - b. With right arm fully extended over the head
 - c. Hand open
 - d. Repeated overhead arcs from level of right shoulder to level of left shoulder

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KEY POINTS

STANDARD WINCH SIGNALS

1. Wind cable in
2. Wind cable out
3. Stop
4. Move vehicle left

Information Sheet #2

- 1a. Facing the winching vehicle
 - b. With right arm fully extended to right side of the body
 - c. At shoulder height
 - d. With right hand in a fist
 - e. Raise thumb
- 2a. Facing the winching vehicle
 - b. With right arm fully extended to the right side of the body
 - c. At shoulder height
 - d. With right hand in a fist
 - e. Point thumb toward the ground
- 3a. Facing the winching vehicle
 - b. Both arms fully extended
 - c. To the front of the body at shoulder height
 - d. Palms open and directed outward
 - e. Palms perpendicular to the ground
- 4a. Facing the winching vehicle
 - b. With right arm flexed slightly to the right side of the body
 - c. At head height
 - d. Right hand in a fist
 - e. Point thumb to the right
 - f. Thumb parallel to the ground



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KEY POINTS

5. Move vehicle right

- 5a. Facing the winching vehicle
- b. With left arm flexed slightly to the left side of the body
- c. At head height
- d. Left hand in a fist
- e. Point thumb to the left
- f. Thumb parallel to the ground



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APPLICATION:

Student to practice until proficient.

EVALUATION:

A performance examination.

ASSIGNMENT:

To be determined by instructor(s).